MATTERS ARISING

Laboratory techniques for the diagnosis of chlamydia infections

We read with interest the article by Taylor-Robinson[1] on laboratory diagnosis of chlamydia infections as we had done a prospective trial on chlamydia serology. The aim of the study was to determine the correlation between chlamydia serology and ELISA antigen detection (IDEIA Chlamydia test) in the diagnosis of uncomplicated genital chlamydia infection.

Patients attending the genitourinary medicine department at the Coventry and Warwickshire hospital were enroled. Following a standard genitourinary medical history, and an examination, chlamydia swabs were obtained from the urethra in the males and cervix in the females in the routine manner (along with other screening tests). In males urine had been held for 2–4 hours. The swabs obtained were transported in a chlamydia transport medium and the IDEIA Chlamydia test (Novo Bio Labs Ltd) was used for the antigen detection. The blood sample obtained for syphilis serology was saved for the estimation of anti chlamydia IgG and IgA antibodies using the IPAzyme immunoperoxidase test (Biological industries Ltd). Samples were tested in doubling dilutions 1/16 to 1/128 for the estimation of IgG and 1/8 to 1/64 for IgA, in patients who were found to be positive on IDEIA Chlamydia test and a similar control group which was negative. The control group had no history of recent antibiotic therapy; however, some of their partners belonged to the chlamydia positive group. Total of 31 IDEIA Chlamydia test positive patients and 26 negative patients were enroled and the results are given in the table.

IDEIA ag detection is of moderate sensitivity and relatively high specificity and the predictive value of a positive result will be high in a high prevalence population,[1] such as in a genitourinary medicine clinic. Chlamydia serology has been claimed by others to show high sensitivity, good negative predictive value but lower specificity in different populations.[2,3]

In this study, irrespective of the dilutions used or a combination of IgA and IgG titres, no statistical difference was seen between the groups. There was no apparent correlation between the presence or absence of chlamydia antibody and the antigen, using the laboratory techniques mentioned earlier.

Although firm conclusions can not be made on this limited study our results do agree with the conclusions Taylor-Robinson made on the "dubious value" of the chlamydia serology in the diagnosis of nonspecific urethritis in men or uncomplicated cervical infection in women.

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1 Taylor-Robinson D, Thomas BJ. Laboratory techniques for the diagnosis of chlamydia infections. *Genitourin Med* 1991;67:256–66.
2 Csango PA, Sarav B, Schiotz H, Sarav I. Comparison between cell culture and serology for detecting *Chlamydia trachomatis* in women seeking abortion. *J Clin Pathol* 1988;41:89–92.
3 Hagey ZJ, Sarav B, Sachs J, Shaked O, Sarav I. Detecting *Chlamydia trachomatis* in men with urethritis: serology vs cell culture. *Genitourin Med* 1989;65:166–70.

Table Comparison of chlamydia serology in chlamydia positive and negative groups

Antibody dilution	*Chlamydia positive group N = 31 (%)*	*Chlamydia negative group N = 25 (%)*
IgG > 1/16 to < 1/32	10 (32)	10 (40)
IgG > 1/64	23 (74)	20 (80)
IgA > 1/8 to < 1/16	5 (16)	10 (40)
IgG > 1/64 IgA > 1/8 to < 1/32	5 (16)	7 (28)
IgG > 1/16 to < 1/32 IgA > 1/8 to < 1/32	5 (16)	10 (40)

No statistical difference seen using chi square test.

Genital human papillomavirus lesions of the male sexual partners: the diagnostic accuracy of peniscopy

We were interested to read the article by Hippeläinen *et al*[1] concerning peniscopy and the carriage of human papillomavirus (HPV) DNA by male partners of women who had abnormal Papanicolaou smears. If we are to assume that HPV is transmitted predominantly by sexual contact,[2] it follows that men are involved in about half of the epidemic. This factor does not seem to be reflected in the current literature, which, despite the explosion of interest in the topic, still constitutes only a small minority of the publications. For example, only 20 (4·7%) of 424 papers presented at the recent papillomavirus workshop in Seattle directly concerned male carriage of HPV. This paucity of data is presumably, at least in part, due to the lack of a male counterpart of the Papanicolaou smear, which forms the basis of much current epidemiological work. The study of Hippeläinen *et al* is, therefore, a significant contribution to the field. However, we would like to raise several points.

The term "peniscopy" has been used previously,[3] but other authors use terms such as "androscopy",[4] "magnified penile surface scanning"[5] and, probably the least appropriate term, "colposcopy".[6] We suggest that the term "penoscopy" should be adopted, as its form is more consistent with the words used to describe other techniques which augment clinical visualisation, such as gastroscopy and bronchoscopy.

The whole area of HPV epidemiology is bedevilled by the absence of a universally agreed "gold standard". Clearly, from the data presented in this article, histology alone cannot be relied upon, as only 34 (35·4%) of 96 biopsies that showed histological criteria of HPV infection contained HPV DNA. As detection was not only by in situ hybridisation but also by the PCR, it seems likely that most of the lesions biopsied did not contain the so-called "genitotropic" HPVs tested for. This is surprising, as in most studies DNA of the genitotropic HPVs has been detected in approximately 90% of condylomata acuminata.[7] Several explanations are possible for these observations. Penoscopically abnormal areas may be caused by HPV types which are dif-